

Civilizational Growth vs. Ecological Limits: A Thought Experiment for a New Global Governance Paradigm

Abstract

This paper presents a thought experiment that examines the fundamental contradiction between our current civilization, oriented toward infinite growth, and the finite planetary ecosystem. This paper proposes a global cooperation framework based on the "Survival First Principle," with key components including the conversion of sovereign debt into "Civilization Survival Bonds" and the use of global joint anti-corruption efforts as a starting point for building trust. The aim is to spark interdisciplinary discussion and provide a strategic contingency plan for a potential civilizational-level crisis.

I. Preamble

The current trajectory of global development appears to point toward several bleak scenarios:

1. The irreversible collapse of the global ecosystem, while nuclear war is avoided.
2. The outbreak of nuclear war, after which the surviving population lacks the capacity to manage the global environment.
3. The simultaneous eruption of both nuclear war and ecological catastrophe.

This paper explores a potential fourth path: through a new global compact, allowing nations to convert a portion of their sovereign debt into "Civilization Survival Bonds." This would bind creditors' interests to the probability of humanity's collective survival, thereby alleviating global economic pressures, easing geopolitical tensions, and creating momentum for global cooperation in facing existential threats. This document is an "intellectual experiment designed to spark discussion" and a "strategic contingency plan for a civilizational-level crisis," not a mature policy blueprint.

II. Basic Assumptions and Methodological Framework

1. This framework is an interdisciplinary thought experiment, derived from publicly available research on ecosystems, climate change, and socio-economic models. The author calls upon experts from all fields to verify, substantiate, or refute it with concrete data and models.
2. This concept is based on a potential premise: human activity has exceeded multiple planetary boundaries, and the global ecosystem risks irreversible collapse.
3. The ultimate goal of this concept is to explore the non-violent integration of global governance to address common existential threats.
4. This endeavor not only challenges ruling and economic classes but is also a measure to release pressure and prevent all crises from erupting simultaneously before a final catastrophic breakdown.
5. Many debates focus on the warming potency of CO2 or natural cycles, yet evade the core issue: human activity has exceeded planetary boundaries, and the entire Earth's

ecosystem is losing its balance. This is not a question of right or wrong; it concerns how human society as a whole should respond when the planet experiences extreme climate events and disasters.

6. We sincerely welcome and highly value any more constructive solutions.

Resource Consumption and Systemic Paradoxes

Core Formula:

Infinite Growth Economic Model $\times$ Finite Planetary Ecosystem = Collective Survival Crisis.

Every war humanity wages, every round of predatory resource exploitation, is a direct assault on Earth's life-support systems. The current economic model treats "ecological carrying capacity" and "climate stability" as free assets, when in reality they are the most precious civilizational survival capital we are rapidly depleting.

Three Fatal Paradoxes:

- The Military Paradox: Conflicts sparked by territorial and resource disputes, fueled by glacial melt and resource depletion, are likely future triggers for war. However, waging war for this purpose is akin to fighting for deck chairs on the Titanic while accelerating its sinking. The belligerents are collectively destroying the very habitable planet they claim to be fighting for.
- The Economic Paradox: The GDP-centric growth paradigm is historically correlated with high resource consumption and environmental destruction. Much of what is called "economic development" is, in fact, paper prosperity achieved by discounting and consuming future ecological stability (e.g., a stable climate, biodiversity). We disguise what should be accounted as ecological debt as present-day profit—a collective financial illusion.
- The Technological Paradox: The "bunker salvation theory" ignores systemic fragility. Maintaining small, closed ecosystems requires immense, continuous energy and global supply chain support. Should global industrial civilization collapse (a likely consequence of a large-scale systemic disaster), all high-tech life-support systems would fail within a foreseeable timeframe. In a post-collapse world, the greatest danger would not be the natural environment, but other intelligent, organized humans fighting for the remaining resources.

The Incontrovertible Scientific Reality:

Physical laws take precedence over political stances.

The consequences of breaching planetary boundaries will not discriminate based on nationality or belief. We collectively face a closing window of opportunity for action.

(I) Core Positioning and Ultimate Goal

- Positioning: This concept is not a religion or a cult of personality, but rather a civilizational-level crisis-response protocol aimed at addressing imminent global survival threats (e.g., ecological collapse, climate tipping points).
- Goal: To create a neutral "consensus symbol" or "collaboration framework" that

transcends nations, states, and ideologies, breaking the trust barriers of current international cooperation and redirecting global efforts towards the highest priority objective: species survival.

(II) Foundational Logic and Urgency

1. The Survival First Principle: When civilization faces existential physical threats (e.g., the irreversible rise of global average temperature), all secondary conflicts (geopolitics, economic competition) must be subordinated to the fundamental task of collective survival.

2. System Failure Diagnosis: The existing international governance system (nation-states, short-term interest games) has proven incapable of handling global, exponentially growing survival crises. Its mode of internal competition is accelerating our shared destruction. A deeper insight reveals this failure is universal. Core think tanks and policy circles in every country face the same problem. They, too, are held hostage by structural forces—the military-industrial complex, partisan politics, religious interests, and short-term capital. Many individuals within these systems are filled with a sense of powerlessness and a desire to disengage. Some who push adversarial agendas may not do so out of pure belief, but rather from a desperate rationality—a scramble for the “last lifeboat” as the system teeters on the brink. The same logic applies to most traditional religious systems, which are either consumed by doctrinal infighting or rendered silent by their ties to secular power, equally incapable of responding to the ultimate survival test. This indicates that the crisis can no longer be solved by any of the old systems alone.

(III) Key Implementation Pathways and Concepts

Global integrative governance may evolve into a necessary means of survival. The impending survival crisis could compel most nations and groups, driven by common interest, to converge toward unity. Transnational anti-corruption cooperation, occupying the moral high ground and enabling direct asset recovery, presents a feasible entry point for initial trust-building among nations. However, global asset restructuring and personnel mobility may also intensify social tensions within many countries, constituting a high-risk scenario that requires management.

1. The Launch Phase: “Global Joint Anti-Corruption” as a Trust-Building Entry Point

- Rationale: Anti-corruption occupies the moral high ground, can directly recover massive assets to establish a common fund, provides initial momentum for joint action, and is the most feasible entry point for breaking the zero-sum game.

- Action: Advocate for establishing joint anti-corruption and the recovery of illicit assets and fugitives as the first core agenda items of a potential Global Survival Alliance.

2. The World Economic Architecture Phase: Constructing Three Pillars

- Judicial and Trust Pillar: Promote the establishment of transnational judicial cooperation mechanisms.

- Economic and Interest Pillar: Promote the design of new global economic rules that transcend zero-sum games, ensuring cooperation delivers mutual benefits.

- Technology and Solutions Pillar: Promote the pooling of global wisdom and resources to jointly develop technological solutions to the crisis.

3. Safeguard Mechanisms: Built-in "Safety Valves"

- The system design must incorporate checks and balances and "sunset clauses" to prevent the infinite concentration of power, ensuring it always serves the survival goal, not the private interests of any group.

(IV) Strategic Significance and Recommendations

1. Opportunity: This concept highly aligns with the vision of a "Community with a Shared Future for Mankind."

2. Risk: Passive waiting risks losing the initiative in a future scenario of global chaos. The crisis will not wait for us.

3. Politics: Governments worldwide are exhausted by entangled interests. This framework could also help governments partially disentangle themselves from these interests.

4. Recommendation: Consider incorporating such non-traditional security topics into forward-looking research and, when appropriate, participating in or guiding international discussions on relevant agendas to build strategic reserves for the future.

(V) Economic Recommendations and Concepts:

1. Debt Conversion: Allow nations to convert portions of their sovereign debt into "Civilization Survival Bonds." Creditors shift from holding single-nation credit to holding a stake in the probability of human civilizational survival. This transforms a bankruptcy crisis into a moment of solidarity.

2. Civilizational-Level Debt Restructuring: For many existing technologies with no immediate replacements, like gasoline/diesel engines, avoid crude "dismantling." Instead, design a "retirement timeline" and a "transition buffer zone." For instance, convert a portion of gasoline-powered vehicles to run on natural gas where possible. This "oil-to-gas" transition serves as a bridge in energy reform, buying time for genuine new energy sources to emerge. Simultaneously, set clear phase-out schedules for disposable manufacturing and other high-energy-consumption industries, and dedicate all efforts to developing relevant applied technologies to rapidly replace a portion of the world's existing stock. Oil Company Transition: Provide reference directions, e.g., vigorously develop geothermal technology, carbon sequestration, hydrogen energy transportation, and increase natural gas utilization during the transition period while correspondingly reducing petroleum extraction.

III. Conclusion

This concept is a strategic contingency plan derived from the stern reality of physical laws. It proposes a potential path to initiate global cooperation at minimal cost to confront an ultimate crisis. Its value lies in offering a solution reference that transcends existing mental frameworks, for policymakers to carefully consider in long-term strategy formulation.

It must be emphasized that this concept does not seek simple subversion or deprivation, but rather aims to build a more predictable and stable civilizational order. For participants in the current system, the old model, while yielding short-term benefits, carries hidden costs—including endless internal friction, high uncertainty, and the risk of systemic collapse—that are becoming unbearable. This new system, through clear rules and transparent mechanisms, would significantly reduce the immense mental cost of this internal strategic competition. Participants might experience short-term pain, but would gain long-term security, free from fear and persistent anxiety. This is a paradigm shift from "high-cost, high-risk predatory survival" to "low-cost, sustainable governance-based development." Ultimately, an orderly, predictable environment is the fundamental guarantee for truly maximizing benefits for all participants in the system.

This is a common cause for all humanity, one that cannot be divided by camps, should not be judged by good or evil, and where no one can be made a scapegoat.

IV. Discussion Topics

1. The Shift in Driving Force: After Debt Transformation, Where Does Civilization Go? This is not merely a financial restructuring, but a fundamental shift in civilization's operating system. Global capital and human effort will pivot from boundless horizontal expansion and exploitation to focused vertical development within planetary boundaries — aimed at planetary restoration, enhancing efficiency, and expanding cognition. The narrative of civilization will evolve from "Growth" to "Ascension".

2. Technology Ignition: How Does It Catalyze Genuine Transformation in Energy and Technology?

It will actively trigger a technological singularity by creating the most powerful "demand gravity field" and "resource pool" in history. Once solving energy and environmental problems becomes the most profitable and honorable undertaking globally, capital and genius will flood in, converging with unprecedented synergy to break through technological barriers that currently seem insurmountable.

3. Historical Reconciliation: How Does It Confront Historical "Black Assets" and in What Form Are They Accepted?

It offers a stark yet just "Historical Redemption Contract." It allows certain "black assets" to gain legitimacy within the new system by supporting civilizational survival, at the cost of entering a fully transparent, irreversible trajectory as contributors. This constitutes a one-time severance from the sins of the old era and represents the ultimate method for converting destructive energy into a constructive force.

4. Redefining Existence: How Does It Define Human Survival in the Age of AI?

As AI takes over most production, human value will be re-anchored. The definition of "survival" will shift from "not being eliminated" to "finding irreplaceable roles rooted in creativity and care." The system, through "contribution credits," measures and rewards all actions with positive civilizational impact, ensuring everyone finds their dignity and place in the AI era.

5. Governance Revolution: Does This Mean "Contribution" Will Replace "Taxation"?
In its ultimate form, direct, quantifiable "contribution" to civilization will likely become the primary method for individuals and institutions to fulfill their social responsibilities, partially or even wholly replacing traditional taxation. The source of public finance will become more directly and transparently tied to the well-being of humanity and the planet — because the work of every one of us is, in itself, a contribution.

V. Author's Statement

I am not any organization, yet I can be any. I am not any political party or government, yet I can support any. I am not any religion, yet I can join any. Because I am a common person, and my stance is to make the world a better place.
This work is licensed under the Creative Commons Attribution-NonCommercial 4.0 International License.

Contributor (Pseudonym): zxc

《文明增长与生态极限：新全球治理范式的思想实验》

摘要

本文是一项思想实验，旨在探讨当前以无限增长为导向的文明模式与有限行星生态系统之间的根本性矛盾。本文提出了一个基于“生存优先原则”的全球合作框架，其核心包括主权债务向“文明生存债券”的转换、以及以全球联合反腐作为信任构建的起点等设想。本文旨在激发跨学科讨论，为应对潜在的文明级危机提供战略性预案参考。

一、前言

当前全球发展的轨迹，似乎指向几个黯淡的未来情景：

1. 全球生态系统发生不可逆崩溃，同时避免了核战争。
2. 核战争爆发，幸存人口缺乏管理全球环境的能力。
3. 核战争与灾难同时爆发。

本文试图探讨第四条路径：通过一种新型全球契约，将各国的主权债务部分转化为“文明生存债券”，将债权人的利益与人类整体的生存概率绑定，从而疏导经济压力，缓解地缘政治紧张，并为全球合作应对生存危机创造动力。本文是一个“旨在激发讨论的思想实验”和“文明级危机的战略性预案”，而非一个成熟的政策蓝图。

前提

二、基本假设与方法论述

1. 本文框架为跨学科思想实验，基于对现有生态系统、气候变化及社会经济模型的公开研究推演而成。作者呼吁各领域专家用具体数据与模型对其予以验证、充实或驳斥。
2. 本构想立论于一个潜在设想：人类活动已超载多个行星边界，全球生态系统有走向不可

逆崩溃的风险。

3. 本构想的终极目标是探索以非暴力方式实现全球协同治理，以应对共同生存威胁。

4. 此事不仅为统治和经济阶层带来挑战，更是为了在灾难总爆发前分解压力、避免所有问题同时井喷的举措。

5. 许多人争论二氧化碳的增温效应或自然周期的波动，却回避了核心问题：人类活动已超出行星边界，整个地球生态系统正在失衡。这本身不是对错的问题，这关乎的是，当地球发生极端气候/灾难时，整体人类社会应该如何应对的问题。

6. 诚挚欢迎并高度重视任何更具建设性的解决方案。

资源消耗与系统悖论

核心公式

无限增长的经济模型 $\times$ 有限的星球生态系统 = 集体生存危机。人类的每一次战争、每一轮对自然资源的掠夺性开发，都是对地球生命支持系统的直接攻击。当前经济模型将“生态承载力”与“气候稳定性”视为免费资产，实则是我们正在快速消耗的、最宝贵的文明生存本金。

三大致命悖论

军事悖论：由冰川融化、资源枯竭所引发的领土与生存空间争端，很可能成为未来冲突的导火索。但为此发动战争，无异于为了争夺泰坦尼克号上的躺椅而加速其沉没。交战双方实际上是在共同摧毁他们声称要争夺的唯一生存基础——一个宜居的星球。

经济悖论：以GDP为核心的增长范式，与资源消耗和环境破坏的历史关联性极高。大量所谓的“经济发展”，实则通过贴现和消耗未来的生态稳定性（如气候稳定、生物多样性）来实现的账面繁荣。我们将本应计入成本的生态债务伪装成了当下的利润，这是一种集体的财务幻觉。

技术悖论：“地堡救世论”忽略了系统性的脆弱。维持小型封闭生态系统需要巨大的持续能量和全球供应链的支持。一旦全球工业文明崩溃（这正是大规模系统性灾难的后果），所有高科技生命维持系统将在可预见的时间内失效。在末世，最危险的并非自然环境，而是其他为生存而争夺剩余资源的、有智慧、有组织的人类，无可辩驳的科学现实。

物理定律优先于政治立场。行星边界被突破的后果，不会因国籍或信仰而区别对待。我们正共同面对一个正在关闭的行动时间窗口。

核心定位与终极目标

- 定位：本构想并非宗教或个人崇拜，而是一套旨在应对迫在眉睫的全球性生存危机（如生态崩溃、气候临界点）的文明级危机应对协议。

- 目标：通过创建一个超越民族、国家、意识形态的中立“共识符号”或“协作框架”，打破当前国际合作的信任壁垒，引导全球力量转向物种存续这一最高优先级目标。

基本逻辑与紧迫性

1. 生存优先原则：当文明面临物理性生存威胁时（如全球平均气温的不可逆攀升），所有

次级矛盾（地缘政治、经济竞争）均应让位于联合求生这一根本任务。

2. 系统失灵诊断：现有国际治理体系（民族国家、短期利益博弈）已证明无力应对全局性、指数级增长的生存危机，其内耗模式甚至在加速共同毁灭。一个更深刻的洞察在于：这种失灵是普遍性的。各国核心智库与政策圈层面临同样的问题。他们一样被军工复合体、党派政治、宗教势力以及资本短期利益等结构性力量绑架，其内部一定有一些人充斥着无力感与抽身意愿——甚至部分人推动对抗性议程，也并非全然出于信念，而可能是在系统濒临倾覆时，一种争夺“最后救生艇”的绝望理性。同一逻辑也适用于多数传统宗教体系，它们或在教义纷争中内耗，或因与世俗权力捆绑而失声，同样无力回应终极的生存考验。这一切表明，危机已非任何旧系统能独自解决。

关键实施路径及设想

全球性联合治理可能演变为一种必要生存手段：迫近的生存危机，可能促使大多数国家与群体，基于共同利益而趋向于团结，跨国反腐合作因其占据道德制高点且能直接追回资产，可能成为最初各国构建信任的可行性切入点。但是，全球性的资产重组与人员流动，也可能在一定程度上加剧国内部的社会张力，构成一个需要管理的高风险情景。

1. 启动阶段：全球各国可能会以“全球联合反腐”为信任突破口。
 - 理由：反腐占据道德制高点，能直接追回巨额资产建立共同基金，为联合行动提供初始动力，是打破零和博弈最可行的切入点。
 - 行动：推动将联合反腐、追缴赃款赃物确立为全球生存联盟的首批核心议程。
2. 世界经济架构阶段及设想：构建三大支柱
 - 司法与信任支柱：推动建立跨国司法协作机制。
 - 经济与利益支柱：推动设计超越零和博弈的全球经济新规则，确保合作能带来普惠利益。
 - 科技与方案支柱：推动集中全球智慧与资源，共同开发应对危机的技术方案。
3. 保障机制：内置“安全阀”
 - 系统设计必须包含权力制衡与“日落条款”，防止权力无限集中，确保其始终服务于生存目标，而非任何集团私利。

战略意义与建议

1. 机遇：此构想与“人类命运共同体”理念高度契合。
2. 风险：若被动等待，将在未来可能出现的全球性混乱中丧失主动权。危机不等人。
3. 政治：各国政权因利益纠缠筋疲力尽，这套框架也可以让政权在一定程度上与利益解绑。
4. 建议：可考虑将此类非传统安全议题纳入前瞻性研究，适时以适当方式参与或引导相关议程的国际讨论，为未来做好战略储备。

经济建议及设想

1. 债务转换：允许各国将部分主权债务转换为“文明生存债券”。债权人从持有单一国家信用，转变为持有 人类文明的生存概率。这能将破产危机转化为团结契机。
2. 文明级的债务重组方案：对于许多尚无替代方案的旧技术，如汽油/柴油发动机，不应粗暴‘拆除’，为它们设计一个“退役时间”和“转型缓冲带”。比如，以汽油燃烧为技术的动力装备，尽可能的将一部分油车改成燃烧天然气。油改气作为能源改革的铺垫，以争取真正新能源问世的时间，并为可替代的一次性制造业及其他高耗能产业设定明确的淘汰时间表，全力开发相关应用技术，尽快替换掉世界一部分存量。石油企业转型：有一些方向提供参考，例如。大力发展地热技术、碳封存、氢能源运输，并在过渡期内加大对天然气的利用，相应减少石油开采等等。

三、总结

本构想是基于严峻物理现实推导出的战略性预案。它提出了一条以最小代价启动全球合作、应对终极危机的可能路径。其价值在于提供一种超越现有思维框架的解决方案参考，供决策者在制定长远战略时审慎考量。

必须指出，本构想并非简单地颠覆或剥夺，而是旨在构建一个更具可预期性和长期稳定性的文明秩序。对于当前体系的参与者而言，旧模式虽能带来短期利益，但维持这种利益的隐性成本——包括无休止的内耗、高度的不确定性和系统性崩溃的风险——正变得难以承受。本系统通过建立清晰的规则与透明的机制，将极大降低这种内部博弈的巨大心力成本。参与者或许会经历短期阵痛，但换来的将是免于恐惧和持续焦虑的长期安稳。这是一种从“高成本、高风险的掠夺式生存”向“低成本、可持续的治理式发展”的范式转变。最终，一个有序的、可预测的环境，对体系内的所有参与者而言，才是真正利益最大化的根本保障。这是全人类共同的事业，无法以阵营、好坏来划分，也找不到任何单一的替罪羊。

四、议题

一、动力切换：化债之后，文明将走向何方？

这不仅是金融的重组，更是文明动力系统的根本性切换。全球资本与人力将从无限扩张的横向掠夺，转向有边界的纵向深耕——目标是修复星球、提升效能、拓展认知。文明的故事，将从“增长”转向“升华”。

二、技术引爆：它如何催生真正的变革、能源和技术？

它将通过创造史上最强大的“需求引力场”和“资源池”，主动催生技术奇点。当解决能源、环境问题成为全球最盈利、最光荣的事业时，资本与天才将如潮水般涌入，以前所未有的合力攻克现在看似无解的技术壁垒。

三、历史和解：它如何面对历史的黑资产并以什么形态接纳？

它提供了一份冷酷而公正的“历史赎买契约”。允许部分“黑资产”通过支持文明存续而获得新系统的合法性，但代价是进入一个全面透明、不可逆的贡献者轨道。这是与旧时代罪恶的一次性切割，也是将破坏性能量转化为建设性力量的终极手段。

四、生存定义：它如何定义智能时代的人们如何生存？

当AI接管大部分生产，人的价值将被重新锚定。“生存”的定义将从“不被淘汰”，转变为“找到无可替代的创造性与关怀性角色”。系统通过“贡献积分”衡量并回馈一切对文明有正面意义的行为，确保每个人在AI时代都能找到自己的尊严与位置。

五、治理革命：这是否意味着“贡献”将取代“税收”？

在终极形态下，对文明的直接、可量化的“贡献”，将很可能成为个人与机构履行社会责任的核心方式，从而部分乃至完全替代传统税收。公共财政的来源，将更直接、更透明地与人类和星球的福祉绑定。我们所有人的工作本身就是贡献。

五、声明

我不是任何组织，我可以是任何组织。我不是任何党政，但是我可以支持任何党政。我不是任何宗教，但我可以加入任何宗教。因为我是百姓，我的立场是让世界更美好。

本文档采用 知识共享 署名-非商业性使用 4.0 国际许可协议 进行许可。

投稿人（化名）：zxc